EXHIBIT A

EXHIBIT A (PG. 1/6)

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to:

Attorney Docket No.: 2307Z-085810US Client Reference No.: 98-207-2

Assistant Commissioner for Patents Washington, D.C. 20231

TOWNSEND and TOWNSEND and CREW LLP

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Examiner:

McCarthy III, T.

ABBOTT et al.

Art Unit:

1618

Application No.: 09/127,382

COMMUNICATION

Filed: July 31, 1998

For: OPTICAL AMPLIFICATION OF MOLECULAR INTERACTIONS USING

LIQUID CRYSTALS

Assistant Commissioner for Patents Washington, D.C. 20231

Sir:

On June 7, 2000, Applicants forwarded an Amendment and an unsigned Declaration of the inventors responsive to the Office Action mailed December 7, 1999. In that regard, attached is the Declaration submitted on June 7, 2000, which has been executed by the inventors.

Respectfully submitted,

Jeffry S. Mann Reg. No. 42,837

TOWNSEND and TOWNSEND and CREW LLP Two Embarcadero Center, 8th Floor

San Francisco, California 94111-3834

Tel: (415) 576-0200 Fax: (415) 576-0300

JSM:kad SF 1109079 v1 EXHIBIT A (PG. 2/6)

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to:

Attorney Docket No.: 2307Z-085810US Client Reference No.: 98-207-2

Assistant Commissioner for Patents Washington, D.C. 20231

On June 27, 2000

TOWNSEND and TOWNSEND and CREW LLP

By: Kathryn a. Diglianton

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

ABBOTT et al.

Application No.: 09/127,382

Filed: July 31, 1998

For: OPTICAL AMPLIFICATION OF MOLECULAR INTERACTIONS USING LIQUID CRYSTALS

Examiner:

McCarthy III, T.

Art Unit:

1618

DECLARATION OF NICHOLAS L. ABBOTT, JUSTIN J. SKAIFE, VINAY S. GUPTA, TIMOTHY B. DUBROVSKY

AND RAHUL SHAH

Assistant Commissioner for Patents Washington, D.C. 20231

Sir:

- (1) We, Nicholas L. Abbott, Justin J. Skaife, Vinay S. Gupta, Timothy B. Dubrovsky and Rahul Shah declare as follows:
- (2) That we are the named and true inventors in the above-referenced patent application and that we are co-inventors of the subject matter disclosed and claimed in said application, and the only inventors thereof.
- (3) We understand that the Examiner rejected claims 88-89 and 92-99 of the application under 35 U.S.C. § 102(a) as anticipated by Gupta et al. (1998). We understand "Gupta et al." to refer to an article entitled "Optical Amplification of Ligand-receptor Binding Using Liquid Crystals," Science 279:2077 (1998). We make this declaration to present facts

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ABBOTT et al.

Application No.: 09/127,382

Page 2

showing that Gupta et al. is the disclosure of persons named as inventors of the above-captioned application, and not the disclosure of others.

- (4) That we, Nicholas L. Abbott, Justin J. Skaife, Vinay S. Gupta, and Timothy B. Dubrovsky are co-authors of the article entitled "Optical Amplification of Ligand-Receptor Binding Using Liquid Crystals," *Science* 279:2077 (1998).
- (5) That the above-referenced application discloses subject matter in addition to the subject matter disclosed in Gupta et al.
- (6) That the contribution of Rahul Shah to the present invention, resides in material that is not disclosed in Gupta *et al.* and that Rahul Shah did make an inventive contribution to the subject matter disclosed and claimed in the above-referenced application and, thus, he is a co-inventor of said subject matter.
- (7) We further declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under §1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Dated: 06/16/00	Mlabor.
Dated: 06/19/00	Nicholas L. Abbott
	Justin J. Skaife
Dated:	Vinay K. Gupta
Dated:	Timothy B. Dubrovsky

EXHIBIT A (PG. 4/6)

PATENT

ABBOTT et al.

Application No.: 09/127,382

Page 2

showing that Gupta et al. is the disclosure of persons named as inventors of the above-captioned application, and not the disclosure of others.

- (4) That we, Nicholas L. Abbott, Justin J. Skaife, Vinay S. Gupta, and Timothy B. Dubrovsky are co-authors of the article entitled "Optical Amplification of Ligand-Receptor Binding Using Liquid Crystals," *Science* 279:2077 (1998).
- (5) That the above-referenced application discloses subject matter in addition to the subject matter disclosed in Gupta et al.
- (6) That the contribution of Rahul Shah to the present invention, resides in material that is not disclosed in Gupta et al. and that Rahul Shah did make an inventive contribution to the subject matter disclosed and claimed in the above-referenced application and, thus, he is a co-inventor of said subject matter.
- (7) We further declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under §1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Dated:	Nicholas L. Abbott
Dated:	T i. I Clraifo
Dated: 6 22 2000	Justin J. Skaife Lugy K. Gupta
parou.	Vinay K. Gupta
Dated:	Timothy B. Dubrovsky

EXHIBIT A (PG 5/6)

PATENT

ABBOTT et al. Application No.: 09/127,382

Page 2

showing that Gupta et al. is the disclosure of persons named as inventors of the above-captioned application, and not the disclosure of others.

- (4) That we, Nicholas L. Abbott, Justin J. Skaife, Vinay S. Gupta, and Timothy B. Dubrovsky are co-authors of the article entitled "Optical Amplification of Ligand-Receptor Binding Using Liquid Crystals," *Science* 279:2077 (1998).
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- (6) That the contribution of Rahul Shah to the present invention, resides in material that is not disclosed in Gupta *et al.* and that Rahul Shah did make an inventive contribution to the subject matter disclosed and claimed in the above-referenced application and, thus, he is a co-inventor of said subject matter.
- knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under §1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Dated:	
	Nicholas L. Abbott
Dated:	
	Justin J. Skaife
D-4-4.	
Dated:	Vinay K. Gupta
Dated:06/23/2000	John John John John John John John John
	Timothy B. Dubrovsky

EXHIBIT A (PG. 6/6)

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Dated: 06/16/00

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